

## AMENDMENT(S) TO THE CLAIMS

1. (Currently Amended) A parallel optical interconnect for use in a fiber optic system, comprising:  
a plurality of first segments of optical fibers extending in a side-by-side arrangement;  
a first holder in the form of ribbonizing web material that maintains a plurality of first terminal portions of the first segments in a first predetermined pitch;  
a fiber-fan-out including a plurality of second segments of the optical fibers extending in a diverging arrangement from the plurality of first segments; and  
a second holder that maintains a plurality of second terminal portions of the second segments in a second predetermined pitch that is greater than the first predetermined pitch.

2. (Canceled)

3. (Original) The optical interconnect of Claim 1 wherein the second holder that maintains the plurality of second terminal portions of the second segments in the second predetermined pitch is a discrete body member that extends across the plurality of second segments of the optical fibers.

4-7. (Canceled)

8. (Currently Amended) The optical interconnect of Claim 6 1 wherein each second terminal portion of each of the second segments of the plurality of optical fibers has a ferrule secured around the second terminal portion sized for being received in a receptacle in a corresponding optical subassembly (OSA).

9. (Original) The optical interconnect of Claim 3 wherein the discrete body member has pre-formed holes through which the second segments can be inserted.

10. (Canceled)

11. (Original) A fiber optic system, comprising:  
a plurality of first segments of optical fibers extending in a side-by-side arrangement;

a first holder that maintains a plurality of first terminal portions of the first segments  
4 in a first predetermined pitch so that the first terminal portions can each be optically coupled  
to a corresponding routed optical fiber via a parallel optical connector having the first  
6 predetermined pitch;

a fiber-fan-out including a plurality of second segments of the optical fibers extending  
8 in a diverging arrangement from the plurality of first segments;

a second holder that maintains a plurality of second terminal portions of the second  
10 segments in a second predetermined pitch that is greater than the first predetermined pitch;  
and

12 a plurality of optical subassemblies (OSAs) arranged in an array, each OSA being  
optically coupled to a corresponding one of the second terminal portions of the second  
14 segments.

12. (Original) The fiber optic system of Claim 11 wherein the first holder that  
2 maintains the plurality of first terminal portions of the first segments in the first predetermined  
pitch is ribbonizing web material.

13. (Original) The fiber optic system of Claim 11 wherein the second holder that  
2 maintains the plurality of second terminal portions of the second segments in the second  
predetermined pitch is a discrete body member that extends across the plurality of second  
4 segments of the optical fibers.

14. (Original) The fiber optic system of Claim 11 wherein the first holder that  
2 maintains the plurality of first terminal portions of the first segments in the first predetermined  
pitch is a discrete body member that extends across the plurality of first segments of the  
4 optical fibers.

15. (Original) The fiber optic system of Claim 11 wherein the first holder that  
2 maintains the plurality of first terminal portions of the first segments in the first predetermined  
pitch is a first discrete body member that extends across the plurality of first segments of the  
4 optical fibers and the second holder that maintains the plurality of second terminal portions  
of the second segments in the second predetermined pitch is a second discrete body member  
6 that extends across the plurality of second segments of the optical fibers.

16. (Original) The fiber optic system of Claim 11 wherein the first and second holders are provided by a common housing assembly surrounding the first and second segments of the optical fibers except for the first and second terminal portions.

17. (Original) The fiber optic system of Claim 11 wherein each OSA has a receptacle for receiving a corresponding second terminal portion.

18. (Original) The fiber optic system of Claim 11 wherein the second terminal portion of each of the second segments of the plurality of optical fibers has a ferrule secured around the second terminal portion that is received in a receptacle in the corresponding optical subassembly (OSA).

19. (Original) The fiber optic system of Claim 11 wherein each OSA has a groove for receiving a corresponding second terminal portion.

20. (Canceled)

21. (New) A fiber optic system, comprising:  
a plurality of first segments of optical fibers extending in a side-by-side arrangement;  
a first holder that maintains a plurality of first terminal portions of the first segments in a first predetermined pitch so that the first terminal portions can each be optically coupled to a corresponding routed optical fiber via a parallel optical connector having the first predetermined pitch;

a fiber-fan-out including a plurality of second segments of the optical fibers extending in a diverging arrangement from the plurality of first segments;

a second holder that maintains a plurality of second terminal portions of the second segments in a second predetermined pitch that is greater than the first predetermined pitch;

the first and second holders being provided by a common housing assembly surrounding the first and second segments of the optical fibers except for the first and second terminal portions;

a plurality of alignment pins that extend from at least one end of the housing assembly;  
and

16 a plurality of optical subassemblies (OSAs) arranged in an array, each OSA being  
optically coupled to a corresponding one of the second terminal portions of the second  
18 segments.

22. (New) A fiber optic system, comprising:  
2 a plurality of first segments of optical fibers extending in a side-by-side arrangement;  
a first holder that maintains a plurality of first terminal portions of the first segments  
4 in a first predetermined pitch so that the first terminal portions can each be optically coupled  
to a corresponding routed optical fiber via a parallel optical connector having the first  
6 predetermined pitch;  
a fiber-fan-out including a plurality of second segments of the optical fibers extending  
8 in a diverging arrangement from the plurality of first segments;  
a second holder that maintains a plurality of second terminal portions of the second  
10 segments in a second predetermined pitch that is greater than the first predetermined pitch;  
the first and second holders being provided by a common housing assembly  
12 surrounding the first and second segments of the optical fibers except for the first and second  
terminal portions;  
14 a plurality of alignment pins that extend from at least one end of the housing assembly;  
and  
16 a plurality of ferrules, each secured around a corresponding one of the second terminal  
portions of the second segments.